AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1. (currently amended) A thermal control variable-speed circuit without switching noise, connected with a driving circuit, for controlling the rotation speed of a fan motor, comprising:

a reference voltage output circuit, which is connected to a power supply and outputs a corresponding reference voltage signal, wherein said reference voltage signal is changeable according to ambient temperature and said reference voltage output circuit includes a first resistor, a thermistor and a second resistor, wherein said first resistor is connected with said thermistor in series and connected with said second resistor in an output end, one end of said thermistor is grounded and one end of said second resistor is grounded; and

a driving voltage control circuit, which receives said reference voltage signal and outputs a corresponding driving voltage according to the amplitude of said reference voltage signal, wherein said driving voltage is proportional to said reference voltage signal and used to control the rotation speed of said fan motor.

2. (currently amended) The thermal control variable-speed circuit without switching noise as claimed in claim 1, wherein said reference voltage output circuit further comprises:

~~a first resistor connected to an output end of said reference voltage output circuit in series;~~

~~a second resistor connected to said output end of said reference voltage output circuit in parallel;~~

a third resistor having one end connected to said power supply; and

a fourth resistor having one end connected to the other end of said third resistor and the other end connected to said thermistor, wherein said thermistor has a negative temperature coefficient ; ~~and~~

~~a thermistor with a negative temperature coefficient, which has one end connected to the other end of said fourth resistor and the other end grounded;~~

wherein said first resistor has one end connected between said fourth resistor and said thermistor, and the other end outputting said reference voltage signal; and said second resistor has one end connected to [[an]] said output end ~~of said first resistor and the other end grounded~~.

3. (currently amended) The thermal control variable-speed circuit without switching noise as claimed in claim [[2]] 1, wherein said second resistor is a variable resistor.

4. (currently amended) The thermal control variable-speed circuit without switching noise as claimed in claim 1, wherein said driving voltage control circuit further comprises:

an operational amplifier having a non-inverted input end connected to [[an]] said output end of said reference voltage output circuit for receiving said reference voltage signal;

a fifth resistor connected between an inverted input end of said operational amplifier and an output end of said operational amplifier;

a sixth resistor connected between the inverted input end of said operational amplifier and ground; and

a transistor having a base connected to said [[an]] output end of said operational amplifier, a collector connected to said power supply, and an emitter for outputting said driving voltage.

5. (previously presented) The thermal control variable-speed circuit without switching noise as claimed in claim 1, further comprising a capacitor connected to said driving voltage for filtering noises.

6. (currently amended) A thermal control variable-speed circuit without switching noise, connected with a driving circuit, for controlling the rotation speed of a fan motor, comprising:

a reference voltage output circuit, which is connected to a power supply and outputs a corresponding reference voltage signal, wherein said reference voltage signal is changeable according to ambient temperature and ~~an output end of~~ said reference voltage output circuit includes a thermistor [[is]] connected to a first resistor in series and to a second resistor in parallel, wherein said first resistor and said second resistor are connected in an output end; and

a driving voltage control circuit, which receives said reference voltage signal and outputs a corresponding driving voltage according to the amplitude of said reference voltage signal, wherein said driving voltage is proportional to said reference voltage signal and used to control the rotation speed of said fan motor.

7. (currently amended) The thermal control variable-speed circuit without switching noise as claimed in claim 6, wherein said reference voltage output circuit further comprises:

a third resistor having one end connected to said power supply;

a fourth resistor having one end connected to the other end of said third resistor; and

a thermistor with a negative temperature coefficient, which has one end connected to the other end of said fourth resistor and the other end grounded;

wherein said first resistor has one end connected between said fourth resistor and said thermistor, and the other end outputting said reference voltage signal; and said second resistor has one end connected to ~~an output end of~~ said first resistor and the other end grounded.

8. (previously presented) The thermal control variable-speed circuit without switching noise as claimed in claim 6, wherein said second resistor is a variable resistor.

9. (previously presented) The thermal control variable-speed circuit without switching noise as claimed in claim 6, wherein said driving voltage control circuit further comprises:

an operational amplifier having a non-inverted input end connected to an output end of said reference voltage output circuit for receiving said reference voltage signal;

a fifth resistor connected between an inverted input end of said operational amplifier and an output end of said operational amplifier;

a sixth resistor connected between the inverted input end of said operational amplifier and ground; and

a translstor having a base connected to an output end of said operational amplifier, a collector connected to said power supply, and an emitter for outputting said driving voltage.

10. (previously presented) The thermal control variable-speed circuit without switching noise as claimed in claim 6, further comprising a capacitor connected to a said driving voltage for filtering noises.